(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 28 October 2004 (28.10,2004)

PCT

(10) International Publication Number WO 2004/092530 A3

(51) International Patent Classification7:

E21B 7/20

English

(21) International Application Number:

PCT/US2004/011177

(22) International Filing Date: 13 April 2004 (13.04.2004)

(25) Filing Language:

(26) Publication Language: English

(30) Priority Data: 60/462,750

14 April 2003 (14.04.2003) US

(71) Applicant (for all designated States except US): ENVENTURE GLOBAL TECHNOLOGY [US/US]; 16200 A. Park Row, Houston, TX 77084 (US).

(72) Inventors; and

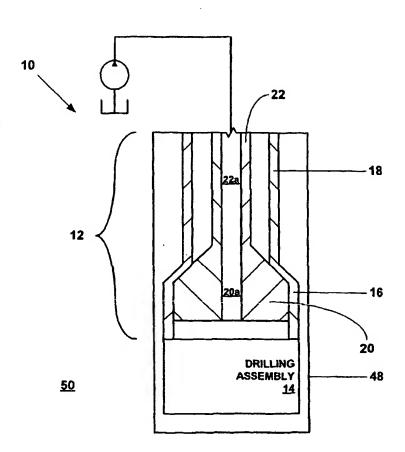
(75) Inventors/Applicants (for US only): COOK, Robert, Lance [US/US]; 934 Caswell Court, Katy, TX 77450 (US). SMOLEN, Randall, Mercer [US/US]; 3027 Kenross, Houston, TX 77043 (US). KENT, Gerald, Edward [CA/CA]; #10 - 26120, TWP. 511, Devon, Alberta T7Y 1B8 (CA). HAY, Richard, Thomas [CA/CA]; 5 Lodgepole Court, St. Albert, Alberta T8N 2R8 (CA). KEEN, Jerry, Lavelle, Jr. [US/US]; 3630 Rolling Terrace, Spring, TX 77388 (US).

(74) Agent: MATTINGLY, Todd; Haynes and Boone, LLP, Suite 3100, 901 Main Street, Dallas, TX 75202 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: RADIALLY EXPANDING CASING AND DRILING A WELLBORE



(57) Abstract: A method of radially expanding a wellbore casing (18) and drilling a wellbore (48).

(84) Designated States (unless otherwise indicated. for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

- of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 21 April 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/11177

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : E21B 7/20 US CL : 175/22,57,171; 166/208,384 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S.: 175/22,57,171; 166/208,384 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) East: (expan\$4 with (rub\$5 pip\$3 conduit\$1 string\$1 casing\$1 liner\$1)) same drill\$3		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where ap US 6,543,552 B1 (METCALFE et al.) 08 April 200	
	especially Figs. 1-7.	
Furthe	r documents are listed in the continuation of Box C.	See patent family annex.
Special categories of cited documents: T" later document published after the international filing date or		"T" later document published after the international fitting date or
	t defining the general state of the art which is not considered to nicular relevance	priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier a date	pplication or patent published on or after the international filing	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
	n which may throw doubts on priority claim(s) or which is cited ish the publication date of another citation or other special reason fied)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
	at referring to an oral disclosure, use, exhibition or other means at published prior to the international filing date but later than the	*&* document member of the same patent family
priority due claimed Date of the actual completion of the international search		Date of mailing of the international search report 4 FEB 2005
07 November 2004 (07.11.2004) Name and mailing address of the ISA/US		Authorized officer
Mail Stop PCT, Attn: ISA/US Commissioner for Patents		Zakiya N. Walker J J John
P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Telephone No. (703) 306-1113